

## CLAIMS

What is claimed is:

- 1 1. An anti-virus program executable by a computer system, comprising:
  - 2 virus scanning routines operable to scan a file and detect a virus;
  - 3 virus removal routines operable to remove the detected virus from the file,
  - 4 the virus removal routines comprising a text editor, operable to search and
  - 5 modify a textual portion of the file under control of virus removal instructions;
  - 6 and
  - 7 the virus removal instructions, which are operable to cause the text editor
  - 8 to remove a virus from the textual portion of the file.
- 1 2. The anti-virus program of claim 1, wherein the removed virus is located
- 2 on one line of text.
- 1 3. The anti-virus program of claim 1, wherein the removed virus is located
- 2 on a plurality of lines of text.
- 1 4. The anti-virus program of claim 1, wherein the text editor comprises a
- 2 search function operable to search a textual portion of a file using a regular
- 3 expression specifying a pattern of text to be matched.

1 5. The anti-virus program of claim 4, wherein the text editor comprises a  
2 mark function operable to mark text matching the regular expression that was  
3 found by the search function.

1 6. The anti-virus program of claim 5, wherein the text editor comprises a  
2 delete function operable to delete text marked by the mark function.

1 7. The anti-virus program of claim 6, wherein the mark function is operable  
2 to mark a start of text and an end of text.

1 8. The anti-virus program of claim 7, wherein the delete function is operable  
2 to delete text between the marked start of text and the marked end of text.

1 9. The anti-virus program of claim 8, wherein the deleted text is located on  
2 one line of text.

1 10. The anti-virus program of claim 8, wherein the deleted text is located on a  
2 plurality of lines of text.

1 11. The anti-virus program of claim 6, wherein:  
2 the search function is operable to search for a start of text to be marked  
3 and the mark function is operable to mark a start marker at the start of text;  
4 the search function is operable to search for an end of text to be marked  
5 and the mark function is operable to mark an end marker at the end of text; and  
6 the delete function is operable to delete text between the start marker and  
7 the end marker.

1 12. A method for removing a virus from a textual portion of a file infected  
2 with a virus, comprising the steps of:  
3 loading the infected file;  
4 searching the infected file to locate text associated with the virus;  
5 marking the located text; and  
6 deleting the marked text.

1 13. The method of claim 8, wherein the searching step comprises the step of:  
2 searching the infected file using a regular expression specifying a pattern  
3 of text to be matched.



4 a memory operable to store computer program instructions executable  
5 by the processor; and  
6 computer program instructions stored in the memory and executable to  
7 perform the steps of:  
8 loading the infected file;  
9 searching the infected file to locate text associated with the virus;  
10 marking the located text; and  
11 deleting the marked text.

1 20. The system of claim 19, wherein the searching step comprises the step of:  
2 searching the infected file using a regular expression specifying a pattern  
3 of text to be matched.

1 21. The system of claim 20, wherein the searching step comprises the step of:  
2 searching for a pattern of text associated with a start of text associated  
3 with the virus.

1 22. The system of claim 21, wherein the marking step comprises the step of:  
2 placing a start marker at a start of text associated with the virus.

1 23. The system of claim 22, wherein the searching step comprises the step of:

2            searching for a pattern of text associated with an end of text associated  
3    with the virus.

1    24.    The system of claim 23, wherein the marking step comprises the step of:  
2            placing an end marker at an end of text associated with the virus.

1    25.    The system of claim 24, wherein the deleting step comprises the step of:  
2            deleting text between the start marker and the end marker.

1    26.    A computer program product for removing a virus from a textual portion  
2    of a file infected with a virus, comprising:  
3            a computer readable medium;  
4            computer program instructions, recorded on the computer readable  
5    medium, executable by a processor, for performing the steps of  
6            loading the infected file;  
7            searching the infected file to locate text associated with the virus;  
8            marking the located text; and  
9            deleting the marked text.

1    27.    The computer program product of claim 26, wherein the searching step  
2    comprises the step of:

3            searching the infected file using a regular expression specifying a pattern  
4    of text to be matched.

1    28.    The computer program product of claim 27, wherein the searching step  
2    comprises the step of:

3            searching for a pattern of text associated with a start of text associated  
4    with the virus.

1    29.    The computer program product of claim 28, wherein the marking step  
2    comprises the step of:

3            placing a start marker at a start of text associated with the virus.

1    30.    The computer program product of claim 29, wherein the searching step  
2    comprises the step of:

3            searching for a pattern of text associated with an end of text associated  
4    with the virus.

1    31.    The computer program product of claim 30, wherein the marking step  
2    comprises the step of:

3            placing an end marker at an end of text associated with the virus.

- 1 32. The computer program product of claim 31, wherein the deleting step
- 2 comprises the step of:
- 3 deleting text between the start marker and the end marker.